

Application No.: 10/743,390  
Response dated November 28, 2005  
Office Action dated August 4, 2005

Docket No.: 21581-00311-US

### REMARKS

Claims 1, 4, 5, 6, 14, and 15 are now in the application. Claims 2, 3, 7-10, 12, 13 and 16-20 have been cancelled without prejudice. Claims 1 and 6 are drawn to the elected species. Claims 4, 5, 11, 14 and 15 are drawn to non-elected species. Claim 1 has been amended to include recitations from prior claims 2 and 3 and to recite that the "chemical conversion coating agent substantially contains no phosphate ions as disclosed in the Specification at page 8, lines 6-7. Claim 1 has also been amended to change the placement in claim of "fluorine" for purposes of clarification and not to limit its scope. Claim 1 has also been amended to clarify that the atom ratio basis relates to the entire chemical conversion coat. Claim 1 also no longer recites "and/or" and makes it clear that (ii) is a mixture of a water-borne resin and at least one member selected from the group consisting of a polyisocyanate compound and melamine resin. Claim 1 has also been amended to recite "surface" in place of "substance" for purposes of clarification and not to limit its scope. Claim 1 has also been amended to recite "subsequent coating comprising pretreating" for purposes of clarification and not to limit its scope.

The claims, where deemed appropriate, have been amended to recite "group" in place of "kind" for purposes of clarification and not to limit their scope. Claim 6 has been amended to clarify that only the zirconium, titanium and hafnium atoms count in calculating ppm.

The specification has been amended as requested by the examiner to enlarge the font for Tables 1, 2 and 3.

The amendments to the claims and specification do not introduce any new matter.

The objection to the specification has been taken care of by the above amendments to the specification.

The rejections of claims 1-3, 6 and 12-13 under 35 USC 112, second paragraph have been obviated by the above amendments to the claims.

The rejections of claims 1-3, 6 and 12-13 under 35 USC 112, first paragraph are not deemed tenable.

The claims have been amended to clarify that the "atom ratio basis" refers to the entire coating which would include the solvent. This would be readily apparent to persons skilled in the art once aware of the present application. Also, the claims have been amended to clarify that

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the ppm refers to only the zirconium, titanium and hafnium atoms. This would, likewise, be apparent to those skilled in the art once aware of this application.

The rejections of Claim 1 under 35 USC 102(b) as being anticipated by US Patent 5,759,244 to Tomlinson et al; of Claim 6 under 35 USC 103(a) as being unpatentable over US Patent 5,759,244 to Tomlinson et al., and of Claims 2 and 12 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, 5 and 11 of copending application 10/743,387 have been overcome by the amendments to claim 1 including the incorporation of recitations from claim 3 therein. Claim 3 was not rejected over these grounds.

Claims 1-3 were rejected under 35 USC 102(b) as being anticipated by US Patent 5,380,374 to Tomlinson (hereinafter '374 Patent). The '374 Patent does not anticipate claim 1 as amended since among other things, it fails to disclose the component (i), or (ii) or (iii). When this component is (ii), not only a water-borne resin but also an isocyanate compound and/or melamine resin are necessary for the present invention as expressed above. Claim 1 now makes that clear. As appreciated by the Examiner, tannin is disclosed as a favorable additive in the '374 Patent. However, the addition of an isocyanate compound and/or melamine resin is not disclosed therein. Therefore, claim 1 as now amended is not identical to the suggestions in the '374 Patent.

Claims 6 and 12-13 were rejected under 35 USC 103(a) as being unpatentable over US Patent 5,380,374 to Tomlinson. The Examiner stated that Tomlinson teaches that the Zr level is 10-5000 ppm which overlaps the claimed range. The '374 Patent does render obvious claims 6 and 12-13 since, among other things, such fails to even remotely suggest the claimed component identified as (i) or (ii) or (iii) as discussed above.

Claims 1-3 were rejected under 35 USC 102(b) as being anticipated by US Patent 5,427,632 to Dolan. Dolan fails to anticipate claim 1 as amended since, among other things, Dolan employs as a component (c) a phosphorus containing inorganic oxyanion. On the other hand, amended claim 1 recites that the chemical conversion coating agent substantially contains no phosphate ions". Therefore, the suggestions in Dolan are not identical to those of amended claim 1.

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Claim 6 and 12-13 were rejected under 35 USC 103(a) as being unpatentable over US Patent 5,427,632 to Dolan. Dolan fails to render obvious claims 6 and 12-13 since, among other things, Dolan does not suggest a composition that substantially contains no phosphate ions as recited in the claims as now amended.

Claims 1-3, 6 and 12-13 were rejected under 35 USC 102(b) as being anticipated by US Patent 6,312,812 to Hauser et al. (hereinafter referred to as the '812 Patent). The '812 Patent fails to anticipate amended claim 1 and claims dependent thereon. In the '812 Patent, 2 steps of coating are applied to the substrate. For example, see the description of claim 1 therein. In the treatment of claim 1, a first pretreatment composition and a second pretreatment composition are used. This fact must be taken into account when comparing the present claims to the '812 Patent. In the '812 Patent, the first pretreatment composition is where the chemical conversion agent of claim 1 of the present invention would be used. The second composition therein is substantially an organic coating composition comprising an epoxy resin and has chemical properties significantly different from the first composition of the '812 Patent or the composition used according to the present claims.

Therefore, a comparison with the first composition is important. The first composition of the '812 Patent does not contain any of component (i), (ii) or (iii). The description therein about polyisocyanate or aminoplast is concerned with the second composition not the first composition. Accordingly, the present claims are novel thereover.

Concerning non-obviousness of the present claims, the excellent properties as pretreatment for coating are obtained without phosphate ions and such properties are not disclosed in the cited art.

Claims 1, 3, 6 and 12-13 were provisionally rejected under 35 USC 103(a) as being obvious over Application No. 10/473,387. This rejection has been overcome by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the co-pending application was derived from the inventor of this application and is thus not the invention "by another".

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance.

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Accordingly, the Examiner is respectfully requested to pass this application to issue.

Please charge any additional fees or credit any over payment to our Deposit Account No. 22-0185, under Order No. 21581-00311-US from which the undersigned is authorized to draw.

Dated: 11-28-05

Respectfully submitted,

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